CHARGEBACK CALCULATOR

CROSS-REFERENCE TO CO-PENDING APPLICATIONS

5   The present application claims priority to and is related to co-pending U.S.

Provisional Application serial No. 60/196,440, filed April 11, 2000, the contents of

which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

10   Field of the Invention

The present invention is generally directed to reimbursing a first party for

goods or services sold by a second party. One exemplary use of the present invention

relates to a method, system and computer program product for reconciling chargeback

amounts in a business-to-business collaborative environment (e.g., in a prescription

15   drug distribution system).

Discussion of the Background

Chargebacks are a standard operating practice in the pharmaceutical industry.

Chargeback payments are used by pharmaceutical manufacturers to reimburse

20   wholesalers for products sold under a manufacturer's discounted price contract. The

chargeback payment amount represents the difference between a Net Wholesale Price

(NWP) and the discounted contract price negotiated between the manufacturer and

Group Purchasing Organizations (GPO).

Institutions managed under the GPO corporate entity buy products directly

25   from a wholesaler under a GPO contract for which they are an eligible member. This

transaction initiates the chargeback from the wholesaler to the manufacturer. To

summarize the overall process flow, the wholesaler buys product from the

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manufacturer at NWP, sells it to an institution under specific GPO contract pricing terms, and then "charges back" the difference to manufacturer. The difference is netted out with a credit to the wholesalers.

Chargeback payment requests from the wholesalers can be processed without

5   any errors/discrepancies. However, due to the nature and volatility of the contract and the demand for accuracy in the chargeback transaction, transaction errors do occur. Errors result when the wholesaler information regarding the transaction does not match the manufacturer's information. Mismatching information could include contract numbers, institution (DEA/HIN) identifiers, membership eligibility, product

10   (NDC), price, etc. When this happens, the manufacturer rejects the chargeback request and a reconciliation process with the wholesaler is begun to resolve the discrepancy. While the majority of chargeback requests are processed without errors, there is still a significant volume of transactions (over 60,000 per month) that are rejected and must go through the reconciliation process. The vast majority of

15   chargeback rejections/disputes occur because of membership issues.

The current process flow for chargeback processing inside of GlaxoSmithKline, the assignee of the present application, typically includes the following major steps:

(1) Wholesalers submit their chargeback request to via Electronic Data

20   Exchange (EDI);

(2) GlaxoSmithKline receives the initial chargeback request, validates the content of the chargeback transaction, and either (i) accepts the transaction for credit, or (ii) rejects the transaction, thereby initiating the reconciliation process;

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(3) As the first step in the reconciliation process, GlaxoSmithKline returns the rejected chargeback detail line items to the wholesalers via EDI or paper in the form of a Chargeback Credit Memo Reconciliation Report;

(4) The wholesaler evaluates the rejected items and can elect to (i) accept the rejection, (ii) resubmit as is, or (iii) correct and resubmit;

(5) Resubmission of the chargeback request is accomplished only via paper;

(6) GlaxoSmithKline processes the paper-based resubmitted chargeback requests; and

(7) GlaxoSmithKline returns the reconciled chargeback request to the wholesalers via EDI or paper (Chargeback Credit Memo Reconciliation Report).

SUMMARY OF THE PRESENT INVENTION

It is an object of the present invention to address chargeback discrepancies, such as those that pose an industry-wide problem in the pharmaceutical industry.

This object and other advantages are addressed by a contract administration and membership component that helps to facilitate the communications of membership changes between a Contract Operations group of a manufacturer, the Wholesalers, the institutions, and the GPO's. One of the major benefits in facilitating the communication of membership changes is to speed up the process of getting the correct membership recorded within the wholesalers' and manufacturer's systems. This results in fewer chargeback rejections.

BRIEF DESCRIPTION OF THE DRAWINGS

A more complete appreciation of the invention and many of the attendant advantages thereof will become readily apparent with reference to the following

detailed description, particularly when considered in conjunction with the

accompanying drawings, in which:

Figure 1A is a schematic illustration of a computer for providing the services

of the present invention;

5   Figure 1B is a schematic illustration of one embodiment of the computer of

Figure 1A providing the services of the present invention;

Figure 2 is a data diagram of the major functions performed by and the data

used by the present invention;

Figure 3A is a data flow diagram of how information is distributed according

10   to one embodiment of the present invention;

Figure 3B is a more detailed data flow diagram of how information is

distributed according to one embodiment of the present invention;

Figure 4 is a diagram showing where various features of the present invention

are carried out;

15   Figure 5A is an illustrative screenshot showing a first embodiment of how a

wholesaler can request information about chargebacks;

Figure 5B is an illustrative screenshot showing how a debit memo search may

be performed according to one embodiment of the present invention:

Figure 6 is an illustrative screenshot showing the results of the request of

20   Figure 5B;

Figure 7 is an illustrative screenshot showing the details of the disputed items

corresponding to the request of Figure 5B and allowing the modification thereof;

Figure 8 is an illustrative screenshot showing a second embodiment of how a

wholesaler can request information about chargebacks;

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Figure 9 is an illustrative screenshot showing a scorecard selected using the interface of Figure 8; and

Figure 10 is an illustrative screenshot showing a global update tool.

5   DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, in which like reference numerals designate identical or corresponding parts throughout the several views, Figure 1 is a schematic illustration of a computer system for managing chargebacks using a wide area network (e.g., the Internet). A computer 100 implements the method of the present

10   invention, wherein the computer housing 102 houses a motherboard 104 which contains a CPU 106, memory 108 (e.g., DRAM, ROM, EPROM, EEPROM, SRAM, SDRAM, and Flash RAM), and other optional special purpose logic devices (e.g., ASICs) or configurable logic devices (e.g., GAL and reprogrammable FPGA). The computer 100 also includes plural input devices, (e.g., a keyboard 122 and mouse

15   124), and a display card 110 for controlling monitor 120. In addition, the computer system 100 further includes a floppy disk drive 114; other removable media devices (e.g., compact disc 119, tape, and removable magneto-optical media (not shown)); and a hard disk 112, or other fixed, high density media drives, connected using an appropriate device bus (e.g., a SCSI bus, an Enhanced IDE bus, or a Ultra DMA bus).

20   Also connected to the same device bus or another device bus, the computer 100 may additionally include a compact disc reader 118, a compact disc reader/writer unit (not shown) or a compact disc jukebox (not shown). Although compact disc 119 is shown in a CD caddy, the compact disc 119 can be inserted directly into CD-ROM drives which do not require caddies. In addition, a printer (not shown) also provides printed

25   listings of chargebacks.

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As stated above, the system includes at least one computer readable medium. Examples of computer readable media are compact discs 119, hard disks 112, floppy disks, tape, magneto-optical disks, PROMs (EPROM, EEPROM, Flash EPROM), DRAM, SRAM, SDRAM, etc. In the broadest sense, even the transmission lines of

5 computer network adapters (e.g., modems, Ethernet, token ring and ATM) are computer readable media since code and/or data may be read from them. Stored on any one or on a combination of computer readable media, the present invention includes software for controlling both the hardware of the computer 100 and for enabling the computer 100 to interact with a human user. Such software may include,

10 but is not limited to, device drivers, operating systems and user applications, such as development tools. Such computer readable media further includes the computer program product of the present invention for providing chargeback analysis. The computer code devices of the present invention can be any interpreted or executable code mechanism, including but not limited to scripts (including Active Server pages

15 and Java Server pages), interpreters, dynamic link libraries, Java classes, and complete executable programs. These computer code devices may run on either one of, or on a combination of, a client and a server computer. Information on providing Web services is provided in the following references which are incorporated herein by reference: (1) Visual Studio Core Reference Set, by Microsoft Press, (2) Visual

20 InterDev 6.0: Web Technologies Reference, by Microsoft Press, (3) Professional Active Server Pages 2.0 by Francis et al., published by WROX Press Ltd., (4) Oracle PL/SQL Programming by Scott Urman, Published: March 1996, (5) Hitchhikers Guide to Visual Basic and SQL Server: with CD-ROM, by William Vaughn, Published: May 1997, (6) Using Microsoft SQL Server 6.5 (Special Edition) by

Stephen Wynkoop, Published: March 1997, and (7) Advanced PowerBuilder 6
Techniques by Ramesh Chandak.

In order to reduce the number of chargeback discrepancies, membership
records are updated frequently (e.g., once every n days (where n ≥ 1) versus once a

5   month). Thus, chargeback rejections will result for only those n days versus a month.
As would be apparent to one of ordinary skill in the art from this disclosure, the
frequency for updating can be made longer or shorter depending on a balancing
between system load and increased discrepancies.

By using the present invention, wholesale customers and manufacturers

10 submit and resolve chargeback resubmissions online. Denied chargeback requests are
reconciled by correcting mismatched information, and the requests are resubmitted (if
appropriate) to the manufacturer.

As shown in Figure 1B, in order to provide this functionality, the present
invention utilizes an eCommerce Database (DB) populated with chargeback data from

15 the Chargeback System and from customer entered parameters. Examples of
applicable databases include any SQL server from Microsoft, Oracle or others, as well
as non-SQL databases (e.g., relational or object-based databases). Flat files can also
be used in place of a database, especially where the data in the flat file may be
presented in a structured format (e.g., XML).

20 For those customers that have selected to have chargeback reconciliation
performed electronically, historical chargeback data is made available for viewing
online. As shown in Figure 2, this includes header information 200 for all chargeback
claims submitted within a specified period (e.g., the past 6 months). In one
embodiment, due to the sheer volume of chargeback data, only rejected or partially

25 rejected line items for claims will be displayed. (Such line items include: (1) detail

lines that were not paid, (2) detail lines that were partially paid, and (3) detail lines that were fully paid but adjusted from the original submission). The chargeback claim history should be searchable by all fields of chargeback information and sorted by claim summary fields. The system will store personalized search/sort criteria for

5   users. As records are viewed, the system will display the manufacturer's status assigned by the Chargeback System.

Disputed information can then be entered or changed on-line using detailed line items 205. The customer will have the option of working multiple line items/records before submitting a batch of them to the manufacturer. Those

10   changes/updates will be tracked as a part of the normal Chargeback System process.

Once all information is changed, claims (e.g., formatted as an EDI or XML file, or as a flat file) may be resubmitted. This file, extracted from the eCommerce database on a scheduled basis, will then be provided as input into Chargeback System normal processing.

15   The data flow of the present invention as described above is illustrated in simplified form in Figure 3A. Generally, data requests are sent from businesses/ customers across a wide area network (e.g., the Internet) using a request transfer protocol (e.g., HyperText Transfer Protocol (HTTP), File Transfer Protocol (FTP), or Gopher Information Services). Those requests are received by an information server

20   (e.g., Web server implementing a Web site) configured to listen to the corresponding type of request (e.g., HTTP requests). For requests for static information, such as general information and forms that are independent of the user, the information server can satisfy the request directly. Some other requests, though, require that data be retrieved in order to respond to the request. The information server then queries a

25   database (e.g., an eCommerce database) to provide the necessary information. In one

embodiment, the data in the database is updated in real-time, and in an alternate

embodiment, the data is a snapshot of the actual data. In Figure 3A, the database is

loaded with a snapshot of three different information sources (i.e., a chargeback

history database, a dispute information database, and a chargeback reconciliation

5   information database) daily. As also seen in Figure 3A, various components of the

system may be distributed between several computers, optionally separated by

firewalls for added security.

In the embodiment illustrated in Figure 3B, the updating of the database is

illustrated as occurring at different rates for different activities. Various information

10   is pushed out of master databases and placed into snapshot databases. The data from

the snapshot databases is then loaded into an eCommerce database accessible by the

information server. (In an alternate embodiment, the snapshot database and the

eCommerce database are merged into a single database that information is imported

into directly and from which data is extracted for direct transmission to the master

15   database.)

As users interact with the information server, it updates data in the

eCommerce database which eventually must be extracted for transmission back to the

master databases. Such data is either pulled (as illustrated) or pushed so that it arrives

to a point that is accessible to the master system(s). The new chargeback data is then

20   loaded into the chargeback system (e.g., once a day). Similarly, data corresponding to

orders taken over the WAN (e.g., the Internet or a private medical WAN) are loaded

into a customer service system periodically (e.g., more frequently than the data is

loaded into the chargeback system). Data is also extracted from the customer service

system periodically (e.g., three times a day) in order to update a snapshot of the

25   products database that can be shipped out from the master system for importation into

the eCommerce database. Similarly, the contracts and reporting systems can export

data that is also transferred to the eCommerce database.

In light of the vast amount of data that is likely to be generated in a

commercial system as described above, filters and/or sorting criteria are provided to

5   keep the data presented to users to a manageable level. As shown in Figure 4, a

chargeback history is available, but a filter/sort option is preferable to an unfiltered

data dump. Nonetheless, using either a filtered or unfiltered interface, at least one

chargeback in dispute can be selected and revised based on a customer's request.

Having revised the chargeback claim to correct any discrepancies, the customer

10   resubmits the chargeback, which is eventually imported into the chargeback system

(as described above with reference to Figure 3B).

Figure 5A illustrates one possible method of filtering/sorting data for easier

analysis by customers.. Chargebacks can be sorted by fields including, but not limited

to, all of a customer's distribution centers, select customer distribution centers, and

15   wholesaler reference identifiers. Also, more specific criteria (e.g., debit memo

numbers, chargeback numbers, data ranges and selectable filter conditions) further

specify conditions to be matched to reduce the number of displayed records. As

would be appreciated by one of ordinary skill in the art, the same filter may be used

by an account administrator/coordinator to administer chargebacks within the

20   manufacturer whose goods are sold. Using the interface, the account administrator

can determine which customers are having trouble with which type of chargebacks.

Figure 5B illustrates an exemplary use of the search capability described in

regard to Figure 5A. As shown in Figure 5B, a debit memo number (e.g.,

"01480430") may be entered by the customer as the criteria by which the chargebacks

25   are to be searched. Figure 6 shows an exemplary display of summary information

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obtained by the web server searching the eCommerce database based on the criteria

entered through search request capability described in regard to Figures 5A and 5B.

As shown in Figure 6, the results of the exemplary search shown in Figure 5B

summarizes the claim amount, disputed amount and other parameters that allow a

5   customer (or account administrator) to quickly understand the nature of the dispute.

Note that the Debit Memo # corresponds to the debit memo number entered in the

search request of Figure 5B (i.e., "01480430").

By selecting the hyperlink corresponding to the "Debit Memo #" field, the

customer initiates another data request that obtains detailed line items from the

10   eCommerce database corresponding to the individual chargeback records for the debit

memo number selected (e.g., "01480430"). As shown in the summary area 300 of

Figure 7, the "DM #" field having a value of "01480430" corresponds to nineteen

disputed transactions. The first three disputed transactions -- two for customer

"BA4894297" and one for customer "AS8240816" -- are initially displayed within

15   the user interface.

Figure 8 illustrates an alternate embodiment of a user interface according to

the present invention. In addition to being able to search based on debit memos or

chargeback details, a user interface according to this embodiment also provides the

option to look at chargebacks that have been resubmitted. Such a feature enables the

20   user to track chargebacks that were previously disputed to see if the dispute has been

resolved.

In an effort to track and efficiently correct the problems associated with

particular customers, the present invention optionally also provides a series of pre-

stored filters that help to identify major problem areas. By ranking problem areas by

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criteria (e.g., age of claim, contract, distribution center, facility or rejection code), a customer may more quickly identify errors in procedure.

Moreover, a scorecard, such as is shown in Figure 9, provides a summary of the results of at least two of the pre-stored filters illustrated in Figure 8. In the

5 exemplary results, the top 3 variances by contract and top 3 variances by facility account for in excess of $349,000 and $248,000, respectively. Perhaps more importantly, the top 3 variance by contract account for more than 1,000 lines of disputed transactions. By correcting the data entry causing those errors, significant work may be avoided. (As would be appreciated by one of ordinary skill in the art,

10 the types and number of variances can be set by the interface designer or customer in order to more closely tailor the error tracking to an individual customer's needs.)

Rather than require each disputed entry to be updated individually, one embodiment of the present invention utilizes a global update tool, as shown in Figure 10. The Global Update Tool provides a way for users (or administrators) to make

15 changes to many detail lines at one time. There are two types of "global" changes that this tool can be used for: (1) changes to resubmittal values or (2) changes to resubmittal status. The flow for changing resubmittal values includes the following steps: (1) select a resubmittal field to be changed, (2) enter the value that the resubmittal field is to be changed to, (3) provide the selection criteria for the lines to

20 be changed, and (4) press/select the "Update" button or option. One possible use of the global update tool is to add or change a contract code associated with all the detailed line items where a contract code changed for a new fiscal year and the user forgot to enter the new code. By selecting a date range and the old code, the user can update all the incorrect codes across multiple detail lines in a single operation. The

25 present inventors have recognized that having a global update tool provides

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significant advantages. For example, rather than addressing problems one detail line at a time, having a global update tool provides a way to globally address a single problem that may be affecting multiple detail lines with a single action.

In one embodiment of the global update tool, the user (or administrator) is
5　provided the option of reviewing a list of all the line items that will be changed as a result of the global update prior to the update so that the user may cancel the update. (Also, since multiple users may be updating line items at a time, the present invention provides checkpoint and rollback capabilities to prevent multiple writers to the same line items.)

10　As would be further appreciated by one of ordinary skill in the art, various security measures will preferably be used to prevent unauthorized use of the system and/or data updates. In addition to tracking the validity of each request as it comes in, in one embodiment the user interface changes depending on the access rights of the user currently using the interface. For example, the interface may present to a less
15　trusted user the ability to only browse chargebacks while letting a more trusted user resubmit chargebacks.

Moreover, in addition to access control, the present invention is preferably augmented with auditing to track who has made each of the submissions, resubmissions and queries. Such tracking not only helps to identify which users need
20　additional training, it also enables the present invention to track if users are reviewing transactions that they were not intended to review.

Obviously, numerous modifications and variations of the present invention are possible in light of the above teachings. It is therefore to be understood that, within the scope of the appended claims, the invention may be practiced otherwise than as
25　specifically described herein.